

stead of the bowels or the kidneys being thus affected; the peritoneum were excited, should we not be presented with hydropic results?

The doctrine, as now received, presumes that ascites is invariably the effect of pre-existing peritonitis, and especially of the sub-acute or chronic state of it, all the remote causes of the disease uniting to produce such an effect. Cases, however, of ascites, do sometimes follow the acute species of peritonitis, though always I believe, when it is originally weak, or much reduced and delicately diffused. The extravasation of coagulable lymph, or the secretion of pus is uniformly the product of it under opposite circumstances. But having so recently presented my views of the pathology of dropsy, I shall not here resume the subject.*

ART. XI. *Note of an interesting fact connected with the Physiology of Vision.* By JOHN D. GODMAN, M. D.

THE inverted images formed upon the retina in consequence of the passage of the rays of light through the apparatus constituting the anterior part of the eye, is well known not to lead to any inaccuracy of judgment as to the position of objects, in case the other senses are in their natural conditions. The following instance communicated to me by REUBENS PEALE, Esq. the uncle of the young man, is the only one with which we are at present acquainted, where the inversion of objects upon the retina was productive of inaccuracy of judgment as to position, notwithstanding all the other senses were in their ordinary condition, and the individual had arrived at the age of seven years.

When his father, who was a distinguished artist, began to give him lessons in drawing, he was very much surprised to find that whatever object he attempted to delineate, he uniformly inverted. If ordered to make a drawing of a candle and candlestick set before him, he invariably drew it with the base represented in the air, and the flame downwards. If it was a chair or table he was set to copy, the same result was the consequence; the feet were represented in the air, and the upper part of the object, whatever it might be was turned to the ground. His father, perplexed at what he considered the perverseness of the boy, threatened, and even did punish him for his supposed folly. When questioned on the subject, the youth stated that he drew the objects exactly as he saw them, and as his drawings were in other respects quite accurate, there was no reason

* Vide Philadelphia Journal of the Medical and Physical Sciences, Vol. IV. N. Series, No. 8. p. 298.

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to doubt his statement. Whenever an object was inverted previous to his drawing it, the drawing was made to represent it in its proper position, showing that the sensations he received from the eye, were exactly correspondent with the inverted pictures formed upon the retina. This condition of his vision was observed to continue for more than a year, when his case gradually ceased to attract attention, which was when he was about eight years old. Since that time he has imperceptibly acquired the habit of seeing things in their actual positions.

[The above case is highly curious and interesting. Professor CHAPMAN has met with one somewhat similar. A distinguished lawyer of this city for some time saw all objects inverted; thus the houses seemed to stand on their roofs, people on their heads, &c. This defect in vision was occasioned by disorder of the stomach, and ceased on that organ being restored to a healthy condition.

Several cases of anomaly of vision, of great interest as connected with the physiology of that function are on record, some of which it may be interesting to notice. Dr. WOLLASTON, in consequence of violent exercise, suddenly found that he could see but half the face of a man whom he met, and it was the same with every object he looked at. Thus, in attempting to read the name Johnson over a door, he only saw — son, the commencement of the word being invisible. On this occasion the loss of sight was towards the left—it was of short duration. Several years afterwards he had a recurrence of the affection, but on this occasion the blindness was the reverse of the former, being to the right. It continued twenty minutes, and was suddenly removed by the excitement of agreeable news. Dr. W. has met with other instances of half blindness.*

Dr. CRAWFORD relates the case of a female who was attacked with a slight hemiplegia of the left side. The patient regained the use of her limbs, but from the time of her seizure till her death, which happened about five years afterwards, when she looked at an object, she could only see the one-half of it, that was towards the right hand,

* Reasoning on these facts, Dr. Wollaston is led to conclude that decussation takes place between the adjacent portions of the optic nerves. Thus, that the portion of nerve that proceeds from the right thalamus to the right side of the right eye, passes to its destination without interference, and in a similar manner the left thalamus will supply the left side of the left eye with a corresponding portion; while the remaining portions of both nerves pass over each other, to the eye of the opposite side, intersecting each other, either with or without intermixture of fibres. This opinion is strengthened by the observations of Treverinus on the *Simia* *aygula*, and the observations of D'Azyr and the Wenzels on the optic nerves in man.

distinctly, the other being very obscure. This was equally the case whether she looked with both eyes or only with the right one; but when she looked with the left only the obscurity was greater. When four fingers were held before her, she could see two of them distinctly, the third she could distinguish, but could not see plainly, and the fourth she could not see at all. When she looked at three fingers she could see two of them pretty plainly—the first, however plainer than the second—the third she could not distinguish at all. When she looked at two fingers she could see only one distinctly.

After she had recovered so as to be able to get out of bed, it was discovered that, although she could see only half of an object plainly, when held directly before her, yet if it was moved towards her right hand, and she continued to look straight forward, she could see the whole of it distinctly. On the contrary, if it was moved toward her left hand, keeping her eyes fixed as before, she could not perceive any part of the object. It should be remarked that it was the left side of the body that was hemiplegic, yet it was the right half of each retina which was insensible.

The writer of this note has been twice affected with a species of half blindness, somewhat different, however, from any he has seen recorded. About twelve or fourteen years ago he was struck with the circumstance of his only seeing a portion of the objects at which he looked, and in order to satisfy himself respecting the state of his vision, he took a book and attempted to read. The lines appeared distorted, thus in looking at a word containing several letters, the first few were seen in their natural position, the remainder were invisible, but upon looking more attentively they were seen just above their natural position, as if occupying the line above, this line not being visible; on moving the eye along, these displaced letters became visible in their natural position, but the next word was seen in the situation of the line above, and so on. It was only when a strong effort to read was made that this distorted appearance was made out, when looking at the page, generally, a portion of it was seen tolerably distinctly, the remainder had a most confused appearance. The second attack was similar to the first—it occurred at an interval of two or three years. In both instances the affection was produced by gastric derangement, attended with considerable head-ache, it went off entirely when the cause was removed—neither continued longer than a few hours.

There is a respectable inhabitant of this city, who for years has had a derangement in the vision of his right eye, all objects that make a strong impression on the retina, as a lamp at night, appearing multiplied sometimes to the extent of seven or eight.

I. H.]